

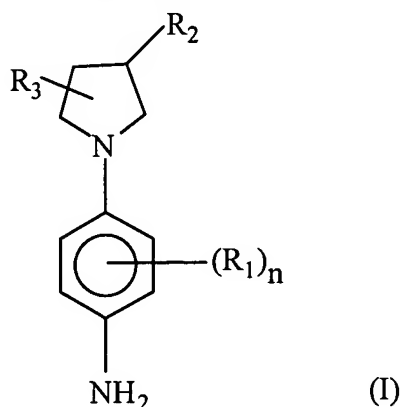
## I. AMENDMENT

### Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A dyeing composition for dyeing keratinous fibres, in particular human keratinous fibres such as hair, comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, at least one non-cationic tertiary para-phenylenediamine, and at least one benzomorpholine coupler.

2. (previously presented) The composition of claim 1, wherein the cationic tertiary para-phenylenediamine corresponds to formula I:



in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals  $R_1$  may be identical or different,

$R_1$  represents a halogen atom; a saturated or unsaturated, aliphatic or alicyclic,  $C_1$ - $C_6$  hydrocarbon chain, it being possible for the chain to contain one or more oxygen, nitrogen, silicon or sulphur atoms or an  $SO_2$  group, and it being possible for the chain to be substituted with one or more hydroxyl or amino radicals; an onium radical Z, the radical  $R_1$  not containing a peroxide bond, or diazo, nitro or nitroso radicals,

$R_2$  represents an onium radical Z or a radical  $-X-C=NR_8-NR_9R_{10}$  in which X represents an oxygen atom or a radical  $-NR_{11}$  and  $R_8, R_9, R_{10}$  and  $R_{11}$  represent a hydrogen atom, a  $C_1-C_4$  alkyl radical or a  $C_1-C_4$  hydroxyalkyl radical,

$R_3$  represents a hydrogen atom or a hydroxyl radical.

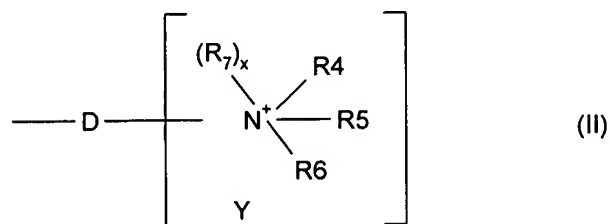
3. (previously presented) The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

4. (previously presented) The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1 and  $R_1$  is chosen from the group consisting of a halogen atom; a saturated or unsaturated, aliphatic or alicyclic,  $C_1-C_6$  hydrocarbon chain; it being possible for one or more carbon atoms to be replaced by an oxygen, nitrogen, silicon or sulphur atom, or by an  $SO_2$  group, the radical  $R_1$  not containing a peroxide bond, or diazo, nitro or nitroso radicals.

5. (previously presented) The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that  $R_1$  is chosen from chlorine, bromine,  $C_1-C_4$  alkyl,  $C_1-C_4$  hydroxyalkyl,  $C_1-C_4$  aminoalkyl,  $C_1-C_4$  alkoxy or  $C_1-C_4$  hydroxyalkoxy radicals.

6. (previously presented) The composition of claim 5, in which the cationic tertiary para-phenylenediamine is such that  $R_1$  is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

7. (previously presented) The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that  $R_2$  represents the onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals and which may carry one or more ketone functional groups;

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub>, taken separately, represent a C<sub>1</sub>-C<sub>15</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> amidoalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical in which the amine is mono- or di-substituted with a C<sub>1</sub>-C<sub>4</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; or

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxy-alkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, a thio (-SH) radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl (-R-SH) radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical;

R<sub>7</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphinyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a

(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a  
(C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkyl-  
carbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-  
C<sub>6</sub>)alkyl radical;

x is 0 or 1,

when x = 0, then the linking arm is attached to the nitrogen atom  
carrying the radicals R<sub>4</sub> to R<sub>6</sub>;

when x = 1, then two of the radicals R<sub>4</sub> to R<sub>6</sub> form, together with  
the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-  
membered saturated ring and D is linked to the carbon atom  
of the saturated ring;

Y is a counter-ion.

8. (previously presented) The composition of claim 7, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> corresponds to formula II in which x is equal to 0 and R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> separately are preferably chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>4</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>4</sub> polyhydroxyalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>4</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> amidoalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, or R<sub>4</sub> with R<sub>5</sub> form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R<sub>6</sub> being chosen in this case from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkyl carboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical.

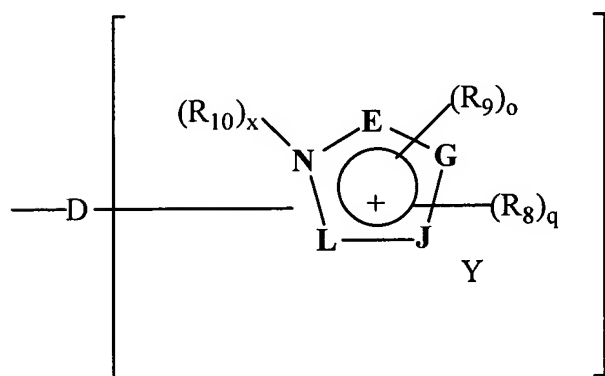
9. (previously presented) The composition of claim 7, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> corresponds to formula II in which x is equal to 1 and R<sub>7</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxy-alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or a (C<sub>1</sub>-

C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; R<sub>4</sub> with R<sub>5</sub> together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R<sub>6</sub> being chosen in this case from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyl alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical.

10. (previously presented) The composition of claim 7, wherein the cationic tertiary para-phenylenediamine is such that D is a single bond or an alkylene chain which may be substituted.

11. (previously presented) The composition of claim 7, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> is a trialkylammonium radical.

12. (currently amended) The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> represents the onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

o is an integer between 0 and 3 inclusive;

q+o is an integer between 0 and 4;

the radicals R<sub>8</sub>, which are identical or different, represent a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, a thio radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; it being understood that the radicals R<sub>8</sub> are carried by a carbon atom,

the radicals R<sub>9</sub>, which are identical or different, represent a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a benzyl radical; it being understood that the radicals R<sub>9</sub> are carried by a nitrogen,

R<sub>10</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a

C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

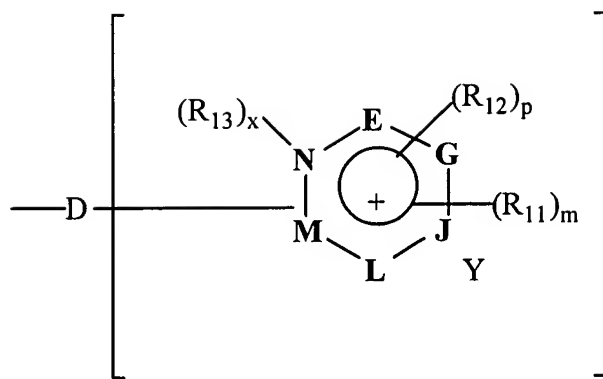
when x = 1, the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion.

13. (previously presented) The composition of claim 12, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

14. (previously presented) The composition of claim 12, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

15. (previously presented) The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R<sub>11</sub>, which are identical or different, represent a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, a thio radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub>



polyhydroxyalkyl radical; it being understood that the radicals  $R_{11}$  are carried by a carbon atom,

the radicals  $R_{12}$ , which are identical or different, represent a  $C_1$ - $C_6$  alkyl radical, a  $C_1$ - $C_6$  monohydroxyalkyl radical, a  $C_2$ - $C_6$  polyhydroxyalkyl radical, a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical, a ( $C_1$ - $C_6$ )alkoxy( $C_1$ - $C_6$ )alkyl radical, a  $C_1$ - $C_6$  carbamylalkyl radical, a ( $C_1$ - $C_6$ )alkylcarboxy( $C_1$ - $C_6$ )alkyl radical, a benzyl radical; it being understood that the radicals  $R_{12}$  are carried by a nitrogen,

$R_{13}$  represents a  $C_1$ - $C_6$  alkyl radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical; a  $C_2$ - $C_6$  polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a  $C_1$ - $C_6$  aminoalkyl radical, a  $C_1$ - $C_6$  aminoalkyl radical whose amine is mono- or di-substituted with a ( $C_1$ - $C_6$ )alkyl, ( $C_1$ - $C_6$ )alkylcarbonyl, amido or ( $C_1$ - $C_6$ )alkylsulphonyl radical; a  $C_1$ - $C_6$  carboxyalkyl radical; a  $C_1$ - $C_6$  carbamylalkyl radical; a  $C_1$ - $C_6$  trifluoroalkyl radical; a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical; a  $C_1$ - $C_6$  sulphonamidoalkyl radical; a ( $C_1$ - $C_6$ )alkylcarboxy( $C_1$ - $C_6$ )alkyl radical; a ( $C_1$ - $C_6$ )alkylsulphonyl( $C_1$ - $C_6$ )alkyl radical; a ( $C_1$ - $C_6$ )alkylsulphonyl( $C_1$ - $C_6$ )alkyl radical; a ( $C_1$ - $C_6$ )alkylcarbonyl( $C_1$ - $C_6$ )alkyl radical; an N-( $C_1$ - $C_6$ )alkylcarbamyl( $C_1$ - $C_6$ )alkyl radical; an N-( $C_1$ - $C_6$ )alkylsulphonamido( $C_1$ - $C_6$ )alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion.

16. (previously presented) The composition of claim 15, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

17. (previously presented) The composition of claim 15, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0 and  $R_{11}$  is chosen from a hydroxyl radical, a  $C_1$ - $C_6$  alkyl radical, a  $C_1$ - $C_6$  monohydroxyalkyl

radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical and R<sub>12</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical.

18. (previously presented) The composition of claim 15, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R<sub>13</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, an amido radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; R<sub>11</sub> is chosen from a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di- substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; and R<sub>12</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical.

19. (previously presented) The composition of claim 15, wherein the cationic tertiary para-phenylenediamine is such that R<sub>11</sub>, R<sub>12</sub> and R<sub>13</sub> are alkyl radicals which may be substituted.

20. (previously presented) The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that the radical R<sub>2</sub> is the radical of formula -XP(O)(O-)OCH<sub>2</sub>CH<sub>2</sub>N<sup>+</sup>(CH<sub>3</sub>)<sub>3</sub> where X represents an oxygen atom or a radical -NR<sub>14</sub>, R<sub>14</sub> representing a hydrogen, a C<sub>1</sub>-C<sub>4</sub> alkyl radical or a hydroxyalkyl radical.

21. (previously presented) The composition of claim 2, wherein the cationic tertiary para-phenylenediamine is such that  $R_2$  is a guanidine radical of formula  $-X-C=NR_8-NR_9R_{10}$ , X represents an oxygen atom or a radical  $-NR_{11}$ ,  $R_8$ ,  $R_9$ ,  $R_{10}$  and  $R_{11}$  representing a hydrogen, a  $C_1$ - $C_4$  alkyl radical or a  $C_1$ - $C_4$  hydroxyalkyl radical.

22. (previously presented) The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium  
bromide,

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl- guanidinium  
choride,

N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium  
chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium  
chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-  
trimethylsilanylpropyl)ammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-  
hexyl)dimethylammonium dichloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine,

{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium  
chloride,

1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium  
chloride,

3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride,

1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride,

3-{3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-tetradecylammonium chloride,

N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium choride,

N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyldimethylammonium dichloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine,

{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride,

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride,

3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl}-1-methyl-3H-imidazol-1-ium chloride,

1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride,

[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,

3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride,

[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,

3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidiny-1-ium chloride,

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidiny-1-ium chloride,

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride,

3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium  
 methosulphate,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium  
 chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium  
 iodide.

23. (previously presented) The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of [1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium  
 bromide,  
 N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium  
 choride,  
 N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium  
 chloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium  
 chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethyl-  
 silanylpropyl)ammonium chloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium  
 chloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-  
 tetradecylammonium chloride,  
 N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethyl  
 guanidinium chloride,  
 N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride,  
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-  
 ium chloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxy-  
 ethyl)dimethylammonium chloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-  
 trimethylsilanylpropylammonium chloride,  
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,  
 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium  
 chloride,  
 3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-  
 imidazol-1-ium chloride,  
 3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-  
 methyl-3H- imidazol-1-ium chloride,  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-  
 imidazol-1-ium chloride,  
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanyl-  
 propyl)-3H-imidazol-1-ium chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyl dimethylammonium iodide,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyl dimethylammonium bromide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium chloride, and  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyl dimethylammonium iodide.

24. (previously presented) The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium bromide,  
 N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium choride,  
 N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride,



[1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-  
 hexyl)dimethylammonium dichloride,  
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-  
 imidazol-1-ium chloride,  
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-  
 trimethylsilylpropyl)-3H-imidazol-1-ium chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium  
 methosulphate,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium  
 chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium  
 iodide.

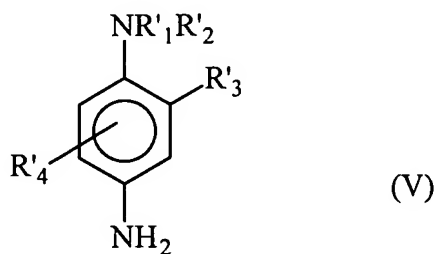
25. (previously presented) The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,  
3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium  
chloride,  
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium  
chloride,  
1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

26. (previously presented) The composition of claim 1, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and  
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium  
chloride.

27. (previously presented) The composition of claim 1, wherein the non-cationic tertiary para-phenylenediamine corresponds to the compounds of general formula (V) and their addition salts with an acid:



in which:

R'<sub>1</sub> is a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical or a linear or branched C<sub>2</sub>-C<sub>6</sub> hydroxyalkyl radical,

R'<sub>2</sub> is a linear or branched C<sub>2</sub>-C<sub>6</sub> hydroxyalkyl radical,

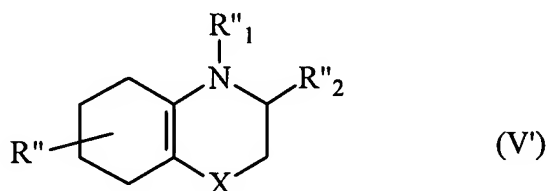
R'<sub>3</sub> denotes a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical or a halogen atom, and

R'<sub>4</sub> is a radical situated at any of the free positions of the benzene ring and denotes a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkoxy radical or a halogen atom.

28. (previously presented) The composition of claim 27, wherein the tertiary para-phenylenediamine not containing a pyrrolidine ring is N,N-bis(β-hydroxyethyl)-p-phenylenediamine.

29. (previously presented) The composition of claim 1, wherein the non-cationic tertiary para-phenylenediamines represent from 0.001 to 15% by weight relative to the total weight of the composition.

30. (previously presented) The composition of claim 1, wherein the benzomorpholine coupler corresponds to the compounds of formula (V') and their addition salts with an acid:



in which:

X represents a sulphur (S) atom or an oxygen (O) atom,

R'' represents a hydroxyl or amino group at the 5, 6 or 7 position,

R''<sub>1</sub> and R''<sub>2</sub> represent a hydrogen atom, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical or a linear or branched C<sub>2</sub>-C<sub>6</sub> hydroxyalkyl radical, it being possible for the benzene ring to additionally contain another linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical.

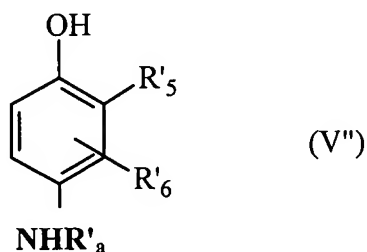
31. (previously presented) The composition of claim 30, wherein the benzomorpholine coupler corresponds to the compounds of formula (V'), and their addition salts with an acid, in which X represents an oxygen atom (O).

32. (previously presented) The composition of claim 30, wherein the coupler is chosen from benzomorpholine, 7-hydroxybenzomorpholine, 7-aminobenzomorpholine, 6-hydroxybenzomorpholine, 6-aminobenzomorpholine, 5-hydroxybenzomorpholine, 5-aminobenzomorpholine, 1-methyl-7-hydroxybenzomorpholine, 2-methyl-7-hydroxybenzomorpholine, 5-hydroxy-7-methylbenzomorpholine.

33. (previously presented) The composition of claim 32, wherein the benzomorpholine coupler is 6-hydroxybenzomorpholine.

34. (previously presented) The composition of claim 1, wherein the benzomorpholine coupler(s) represent from 0.001 to 15%, and preferably from 0.05 to 10% by weight relative to the total weight of the composition.

35. (previously presented) The composition of claim 1, wherein the composition further comprises at least one colorant chosen from the para-aminophenols of formula (V'') and their addition salts



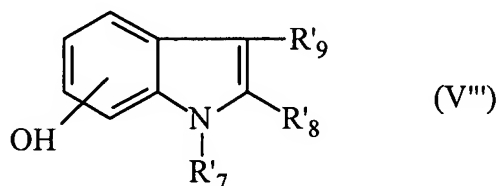
in which:

R'<sub>5</sub> represents a hydrogen or halogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> monohydroxyalkyl, (C<sub>1</sub>-C<sub>4</sub>)alkoxy(C<sub>1</sub>-C<sub>4</sub>)alkyl, C<sub>1</sub>-C<sub>4</sub> aminoalkyl or hydroxy(C<sub>1</sub>-C<sub>4</sub>)alkylamino(C<sub>1</sub>-C<sub>4</sub>)alkyl radical,

R'<sub>6</sub> represents a hydrogen or halogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> monohydroxyalkyl, C<sub>2</sub>-C<sub>4</sub> polyhydroxyalkyl, C<sub>1</sub>-C<sub>4</sub> aminoalkyl, C<sub>1</sub>-C<sub>4</sub> cyanoalkyl or (C<sub>1</sub>-C<sub>4</sub>)alkoxyl(C<sub>1</sub>-C<sub>4</sub>)alkyl radical,

R'<sub>a</sub> represents a hydrogen atom or a C<sub>1</sub>-C<sub>4</sub> alkyl radical, and

the heterocyclic couplers of formula (V''') and their addition salts



in which OH occupies positions 6 or 7 of the aromatic ring and R'<sub>7</sub> denotes a hydrogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl radical; R'<sub>8</sub> and R'<sub>9</sub>, which are identical or different, denote a hydrogen atom, a lower C<sub>1</sub>-C<sub>4</sub> alkyl radical, a carboxyl radical or a (C<sub>1</sub>-C<sub>4</sub>)alkoxycarbonyl radical, and their salts.

36. (previously presented) The composition of claim 35, wherein the para-aminophenol of formula (V'') is chosen from para-aminophenol, 4-amino-3-methylphenol, 4-amino-3-fluorophenol, 4-amino-3-hydroxymethylphenol, 4-amino-2-methylphenol, 4-amino-2-hydroxymethylphenol, 4-amino-2-methoxymethylphenol, 4-amino-2-aminomethylphenol, 4-amino-2-(β-hydroxyethylaminomethyl)phenol, 4-amino-2-fluorophenol, N-methyl-para-aminophenol and their addition salts.

37. (previously presented) The composition of claim 35, wherein the heterocyclic coupler of formula (V''') is chosen from 6-hydroxyindole, 6-hydroxy-

3-methoxycarbonylindole, 6-hydroxy-1-methyl-3-methoxycarbonylindole, 6-hydroxy-1-methyl-2,3-dimethoxycarbonylindole, 6-hydroxy-1,2-dimethylindole, 6-hydroxy-2-methylindole, 6-hydroxy-2-carboxyindole, 6-hydroxy-2,3-dimethylindole, 6-hydroxy-3-carboxyindole, 6-hydroxy-3-ethoxycarbonylindole, 6-hydroxy-2-ethoxycarbonylindole, 6-hydroxy-3-methylindole, 6-hydroxy-1-methylindole, 7-hydroxyindole, 7-hydroxy-3-methylindole.

38. (previously presented) The composition of claim 37, wherein the heterocyclic coupler of formula (V''') is 6-hydroxyindole.

39. (previously presented) The composition of claim 35, wherein the compounds of formulae (V'') and/or (V''') represent from 0.0001 to 10% by weight relative to the total weight of the composition.

40. (previously presented) The composition of claim 1, wherein the cationic tertiary para-phenylenediamine(s) having a pyrrolidine ring represent from 0.001 to 10% by weight relative to the total weight of the composition.

41. (previously presented) The composition of claim 1, wherein the composition further comprises at least one cationic polymer.

42. (previously presented) The composition of claim 1, wherein the composition further comprises at least one thickening polymer.

43. (previously presented) The composition of claim 1, wherein the composition further comprises at least one surfactant chosen from the group consisting of anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.

44. (previously presented) The composition of claim 1, wherein the composition further comprises at least one additional oxidation base chosen from para-phenylenediamines, bis-phenylalkylenediamines, ortho-aminophenols, heterocyclic bases and their addition salts.

45. (currently amended) The composition of claim 44, wherein the additional oxidation base(s) are present in a quantity of between 0.001 to 20% by weight relative to the total weight of the composition.

46. (previously presented) The composition of claim 1, wherein the composition further comprises at least one additional coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene couplers, heterocyclic couplers and their addition salts.

47. (previously presented) The composition of claim 46, wherein the coupler is chosen from 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-( $\beta$ -hydroxyethyloxy)benzene, 2-amino-4-( $\beta$ -hydroxyethylamino)-1-methoxybenzene, 1,3-diaminobenzene, 1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-dimethylaminobenzene, sesamol, 1- $\beta$ -hydroxyethylamino-3,4-methylenedioxybenzene,  $\alpha$ -naphthol, 2-methyl-1-naphthol, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-( $\beta$ -hydroxyethyl)amino-3,4-methylenedioxybenzene, 2,6-bis( $\beta$ -hydroxyethylamino)toluene and their addition salts.

48. (previously presented) The composition of claim 46, wherein the additional coupler(s) are present in a quantity of between 0.001 and 20%, by weight relative to the total weight of the composition.

49. (previously presented) The composition of claim 1, wherein the composition further comprises at least one direct dye.

50. (previously presented) The composition of claim 1, wherein the composition further comprises at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol, polyol monoethers.

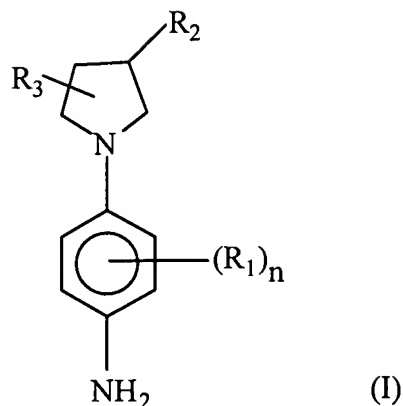
51. (previously presented) The composition of claim 1, wherein the composition further comprises an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxidase enzymes, and preferably hydrogen peroxide.

52. (previously presented) A method for the oxidation dyeing of keratinous fibres such as hair, wherein a dyeing composition as defined in claim 1 is applied to the fibres in the presence of an oxidizing agent.

53. (previously presented) A multicompartment device in which a first compartment contains a dyeing composition for dyeing keratinous fibres, as defined in claim 1, and a second compartment contains an oxidizing agent.

54. (new) A dyeing composition for dyeing keratinous fibres, in particular human keratinous fibres such as hair, comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, at least one non-cationic tertiary para-phenylenediamine, and at least one benzomorpholine coupler, wherein the cationic tertiary para-phenylenediamine corresponds to formula I:



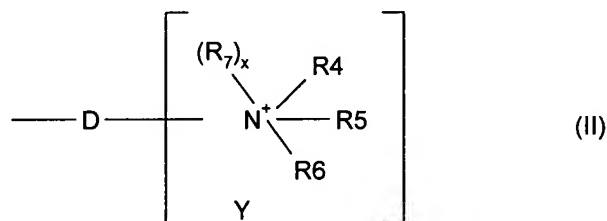


in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals  $R_1$  may be identical or different,

$R_1$  represents a chlorine, bromine,  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  hydroxyalkyl,  $C_1$ - $C_4$  aminoalkyl,  $C_1$ - $C_4$  alkoxy or  $C_1$ - $C_4$  hydroxyalkoxy radical,

$R_2$  represents an onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched  $C_1$ - $C_{14}$  alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl,  $C_1$ - $C_6$  alkoxy or amino radicals and which may carry one or more ketone functional groups;

$R_4$ ,  $R_5$  and  $R_6$ , taken separately, represent a  $C_1$ - $C_{15}$  alkyl radical; a  $C_1$ - $C_6$  monohydroxyalkyl radical; a  $C_2$ - $C_6$  polyhydroxyalkyl radical; a  $(C_1$ - $C_6)$ alkoxy( $C_1$ - $C_6$ )alkyl radical; an aryl radical; a benzyl radical; a  $C_1$ - $C_6$  amidoalkyl radical; a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical; a  $C_1$ - $C_6$  aminoalkyl radical; a  $C_1$ - $C_6$  aminoalkyl radical in which the amine is mono- or di-substituted with a  $C_1$ - $C_4$  alkyl,

(C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; or

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxy-alkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, a thio (-SH) radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl (-R-SH) radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical;

R<sub>7</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphinyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkyl-carbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkyl-sulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

x is 0 or 1,

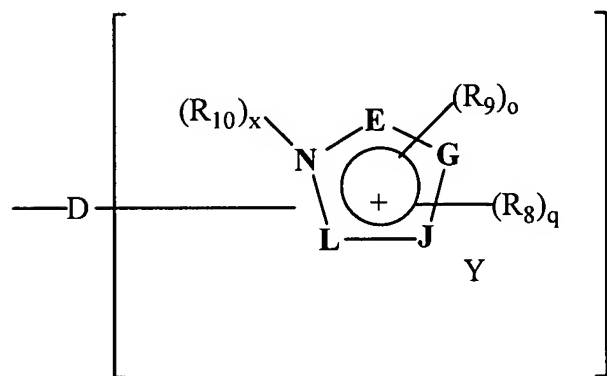
when x = 0, then the linking arm is attached to the nitrogen atom carrying the radicals R<sub>4</sub> to R<sub>6</sub>;

when x = 1, then two of the radicals R<sub>4</sub> to R<sub>6</sub> form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6-

or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion, or

R<sub>2</sub> represents an onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L form an imidazole ring,

q is an integer between 0 and 4 inclusive;

o is an integer between 0 and 3 inclusive;

q+o is an integer between 0 and 4;

the radicals R<sub>8</sub>, which are identical or different, represent a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a C<sub>1</sub>-C<sub>6</sub>

alkylcarbonyl radical, a thio radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; it being understood that the radicals R<sub>8</sub> are carried by a carbon atom,

the radicals R<sub>9</sub>, which are identical or different, represent a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a benzyl radical; it being understood that the radicals R<sub>9</sub> are carried by a nitrogen,

R<sub>10</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

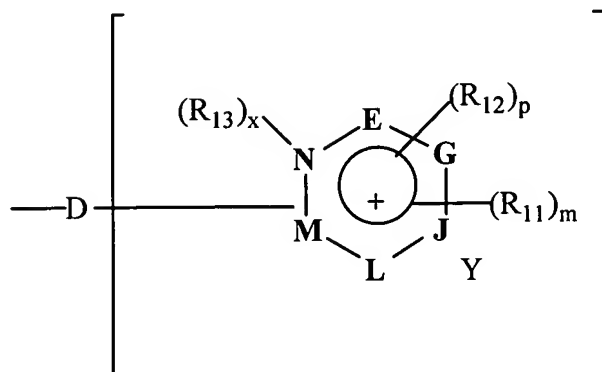
x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J or L,

Y is a counter-ion, or

R<sub>2</sub> represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

p+m is an integer between 0 and 5;

the radicals R<sub>11</sub>, which are identical or different, represent a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, a thio radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a

C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; it being understood that the radicals R<sub>11</sub> are carried by a carbon atom,

the radicals R<sub>12</sub>, which are identical or different, represent a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a benzyl radical; it being understood that the radicals R<sub>12</sub> are carried by a nitrogen,

R<sub>13</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion, and

R<sub>3</sub> represents a hydrogen atom or a hydroxyl radical.

55. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 0.

56. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that n is equal to 1.

57. (new) The composition of claim 54, in which the cationic tertiary para-phenylenediamine is such that R<sub>1</sub> is chosen from a methyl, hydroxymethyl, 2-hydroxyethyl, 1,2-dihydroxyethyl, methoxy, isopropoxy or 2-hydroxyethoxy radical.

58. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> corresponds to formula II in which x is equal to 0 and R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> separately are chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>4</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>4</sub> polyhydroxyalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>4</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> amidoalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, or R<sub>4</sub> with R<sub>5</sub> form together an azetidine ring, a pyrrolidine, piperidine, piperazine or morpholine ring, R<sub>6</sub> being chosen in this case from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, an aminoalkyl radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkyl carboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical.

59. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> corresponds to formula II in which x is equal to 1 and R<sub>7</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxy-alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; R<sub>4</sub> with R<sub>5</sub> together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R<sub>6</sub>

being chosen in this case from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyl alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical.

60. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> corresponds to formula II and D is a single bond or an alkylene chain which may be substituted.

61. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> is a trialkylammonium radical.

62. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> represents an onium radical Z corresponding to formula III, x is equal to 0, and D is a single bond or an alkylene chain which may be substituted.

63. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> represents an onium radical Z corresponding to formula IV, x is equal to 0, and R<sub>11</sub> is chosen from a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical and R<sub>12</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical.

64. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> represents an onium radical Z corresponding to formula IV, x is equal to 1, and R<sub>13</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a



C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, an amido radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; R<sub>11</sub> is chosen from a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di- substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; and R<sub>12</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical.

65. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine is such that R<sub>2</sub> represents an onium radical Z corresponding to formula IV, and R<sub>11</sub>, R<sub>12</sub> and R<sub>13</sub> are alkyl radicals which may be substituted.

66. (new) The composition of claim 54, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium  
bromide,

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl- guanidinium  
choride,

N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium  
chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium  
chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropyl)ammonium chloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-hexyl)dimethylammonium dichloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]oxophosphorylcholine,  
 {2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride,  
 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride,  
 3-{3-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride,  
 1-{2-[1-(4-Aminophenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride,  
 3-{3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-um chloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-tetradecylammonium chloride,  
 N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethylguanidinium chloride,  
 N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium chloride,  
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-trimethylsilanylpropylammonium chloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(trimethylammoniumhexyldimethylammonium dichloride,  
 [1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]oxophosphorylcholine,  
 {2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}trimethylammonium chloride,  
 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpyrrolidinium chloride,  
 3-{3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]-propyl}1-methyl-3H-imidazol-1-ium chloride,  
 1-{2-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yloxy]ethyl}-1-methylpiperidinium chloride,  
 [1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,  
 3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,  
 3-{3-[1-(4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yloxy]propyl}-1-methyl-3H-imidazol-1-ium chloride,  
 [1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]trimethylammonium chloride,  
 3-[1-(5-trimethylsilanylethyl-4-Amino-3-trimethylsilanylethylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride,  
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,  
 1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,

3-{[1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride,

3-{[1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl]methyl}-1-methyl-3H-imidazol-1-ium chloride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]ethyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium iodide,,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium bromide,

[1-(4-aminophenyl)pyrrolidin-3-yl]propyltrimethylammonium methanesulphate,

[1-(4-aminophenyl)pyrrolidin-3-yl]butyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]pentyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]heptyltrimethylammonium iodide,

[1-(4-Aminophenyl)pyrrolidin-3-yl]octyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]decyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyltrimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium chloride,

[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyltrimethylammonium iodide.

67. (new) The composition of claim 54, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride;

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium  
bromide,

N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium  
choride,

N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium  
chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl](2-hydroxyethyl)dimethylammonium  
chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-trimethyl-  
silanylpropyl)ammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]trimethylammonium  
chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-  
tetradecylammonium chloride,

N'-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-N,N-dimethyl  
guanidinium choride,

N-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl] guanidinium choride,

3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-  
ium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-(2-hydroxy-  
ethyl)dimethylammonium chloride,

[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]dimethyl-(3-  
trimethylsilanylpropyl)ammonium chloride,

1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,

1'-(4-Amino-3-methylphenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium  
chloride,

3-{{1-(4-Aminophenyl)pyrrolidin-3-ylcarbamoyl}methyl}-1-methyl-3H-imidazol-1-ium chloride,  
 3-{{1-(4-Amino-3-methylphenyl)pyrrolidin-3-ylcarbamoyl}methyl}-1-methyl-3H-imidazol-1-ium chloride,  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride,  
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-trimethylsilylpropyl)-3H-imidazol-1-ium chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium methosulphate,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium chloride, and  
 [1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium iodide.

68. (new) The composition of claim 54, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,

[1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyltetradecylammonium  
 bromide,  
 N'-[1-(4-Aminophenyl)pyrrolidin-3-yl]-N,N-dimethyl guanidinium  
 choride,  
 N-[1-(4-Aminophenyl)pyrrolidin-3-yl] guanidinium choride,  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium  
 chloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium  
 chloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]dimethyl-(3-  
 trimethylsilanylpropyl)ammonium chloride,  
 [1-(4-Aminophenyl)pyrrolidin-3-yl]-(trimethylammonium-  
 hexyl)dimethylammonium dichloride,  
 1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride,  
 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-(3-trimethylsilanylpropyl)-3H-  
 imidazol-1-ium chloride,  
 3-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-1-(3-  
 trimethylsilanylpropyl)-3H-imidazol-1-ium chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium chloride,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]ethyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium bromide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]propyldimethylammonium  
 methosulphate,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]butyldimethylammonium iodide,  
 [1-(4-aminophenyl)pyrrolidin-3-yl]pentyldimethylammonium iodide,

[1-(4-aminophenyl)pyrrolidin-3-yl]hexyldimethylammonium iodide,  
[1-(4-aminophenyl)pyrrolidin-3-yl]heptyldimethylammonium iodide,  
[1-(4-aminophenyl)pyrrolidin-3-yl]octyldimethylammonium iodide,  
[1-(4-aminophenyl)pyrrolidin-3-yl]decyldimethylammonium iodide,  
[1-(4-aminophenyl)pyrrolidin-3-yl]hexadecyldimethylammonium iodide,  
[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium  
chloride,  
[1-(4-aminophenyl)pyrrolidin-3-yl]hydroxyethyldimethylammonium  
iodide.

69. (new) The composition of claim 54, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

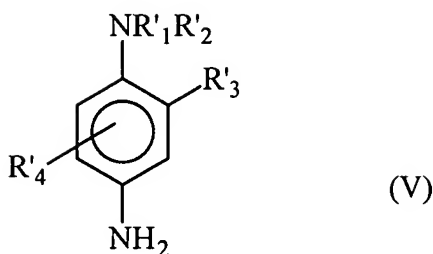
[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride,  
3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium  
chloride,  
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium  
chloride,  
1'-(4-Aminophenyl)-1-methyl-[1,3']bipyrrolidinyl-1-ium chloride.

70. (new) The composition of claim 54, wherein the cationic tertiary para-phenylene is chosen from the group consisting of:

[1-(4-Aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride, and  
[1-(4-Aminophenyl)pyrrolidin-3-yl]-(2-hydroxyethyl)dimethylammonium  
chloride.

71. (new) The composition of claim 54, wherein the non-cationic tertiary para-phenylenediamine corresponds to the compounds of general formula (V) and their addition salts with an acid:





in which:

R'<sub>1</sub> is a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical or a linear or branched C<sub>2</sub>-C<sub>6</sub> hydroxyalkyl radical,

R'<sub>2</sub> is a linear or branched C<sub>2</sub>-C<sub>6</sub> hydroxyalkyl radical,

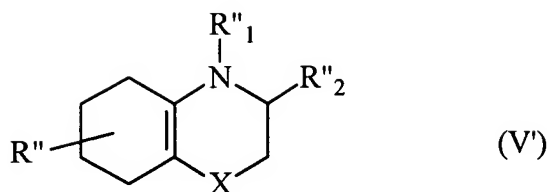
R'<sub>3</sub> denotes a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical or a halogen atom, and

R'<sub>4</sub> is a radical situated at any of the free positions of the benzene ring and denotes a hydrogen atom or a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkoxy radical or a halogen atom.

72. (new) The composition of claim 71, wherein the tertiary para-phenylenediamine not containing a pyrrolidine ring is N,N-bis(β-hydroxyethyl)-p-phenylenediamine.

73. (new) The composition of claim 54, wherein the non-cationic tertiary para-phenylenediamines represent from about 0.001 to about 15% by weight relative to the total weight of the composition.

74. (new) The composition of claim 54, wherein the benzomorpholine coupler corresponds to the compounds of formula (V') and their addition salts with an acid:



in which:

X represents a sulphur (S) atom or an oxygen (O) atom,

R'' represents a hydroxyl or amino group at the 5, 6 or 7 position,

R''<sub>1</sub> and R''<sub>2</sub> represent a hydrogen atom, a linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical or a linear or branched C<sub>2</sub>-C<sub>6</sub> hydroxyalkyl radical, it being possible for the benzene ring to additionally contain another linear or branched C<sub>1</sub>-C<sub>6</sub> alkyl radical.

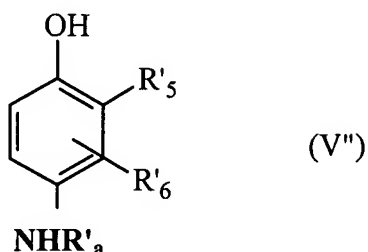
75. (new) The composition of claim 74, wherein the benzomorpholine coupler corresponds to the compounds of formula (V'), and their addition salts with an acid, in which X represents an oxygen atom (O).

76. (new) The composition of claim 74, wherein the coupler is chosen from benzomorpholine, 7-hydroxybenzomorpholine, 7-aminobenzomorpholine, 6-hydroxybenzomorpholine, 6-aminobenzomorpholine, 5-hydroxybenzomorpholine, 5-aminobenzomorpholine, 1-methyl-7-hydroxybenzomorpholine, 2-methyl-7-hydroxybenzomorpholine, 5-hydroxy-7-methylbenzomorpholine.

77. (new) The composition of claim 76, wherein the benzomorpholine coupler is 6-hydroxybenzomorpholine.

78. (new) The composition of claim 54, wherein the benzomorpholine coupler(s) represent from about 0.001 to about 15% by weight relative to the total weight of the composition.

79. (new) The composition of claim 54, wherein the composition further comprises at least one colorant chosen from the para-aminophenols of formula (V'') and their addition salts



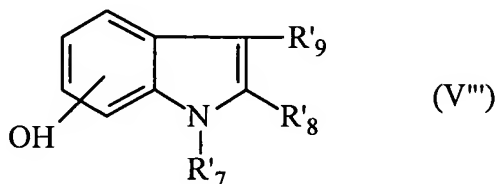
in which:

R'<sub>5</sub> represents a hydrogen or halogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> monohydroxyalkyl, (C<sub>1</sub>-C<sub>4</sub>)alkoxy(C<sub>1</sub>-C<sub>4</sub>)alkyl, C<sub>1</sub>-C<sub>4</sub> aminoalkyl or hydroxy(C<sub>1</sub>-C<sub>4</sub>)alkylamino(C<sub>1</sub>-C<sub>4</sub>)alkyl radical,

R'<sub>6</sub> represents a hydrogen or halogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> monohydroxyalkyl, C<sub>2</sub>-C<sub>4</sub> polyhydroxyalkyl, C<sub>1</sub>-C<sub>4</sub> aminoalkyl, C<sub>1</sub>-C<sub>4</sub> cyanoalkyl or (C<sub>1</sub>-C<sub>4</sub>)alkoxyl(C<sub>1</sub>-C<sub>4</sub>)alkyl radical,

R'<sub>a</sub> represents a hydrogen atom or a C<sub>1</sub>-C<sub>4</sub> alkyl radical, and

the heterocyclic couplers of formula (V''') and their addition salts



in which OH occupies positions 6 or 7 of the aromatic ring and R'<sub>7</sub> denotes a hydrogen atom, a C<sub>1</sub>-C<sub>4</sub> alkyl radical; R'<sub>8</sub> and R'<sub>9</sub>, which are identical or different, denote a hydrogen atom, a lower C<sub>1</sub>-C<sub>4</sub>

alkyl radical, a carboxyl radical or a (C<sub>1</sub>-C<sub>4</sub>)alkoxycarbonyl radical, and their salts.

80. (new) The composition of claim 79, wherein the para-aminophenol of formula (V'') is chosen from para-aminophenol, 4-amino-3-methylphenol, 4-amino-3-fluorophenol, 4-amino-3-hydroxymethylphenol, 4-amino-2-methylphenol, 4-amino-2-hydroxymethylphenol, 4-amino-2-methoxymethylphenol, 4-amino-2-aminomethylphenol, 4-amino-2-( $\beta$ -hydroxyethylaminomethyl)phenol, 4-amino-2-fluorophenol, N-methyl-para-aminophenol and their addition salts.

81. (new) The composition of claim 79, wherein the heterocyclic coupler of formula (V''') is chosen from 6-hydroxyindole, 6-hydroxy-3-methoxycarbonylindole, 6-hydroxy-1-methyl-3-methoxycarbonylindole, 6-hydroxy-1-methyl-2,3-dimethoxycarbonylindole, 6-hydroxy-1,2-dimethylindole, 6-hydroxy-2-methylindole, 6-hydroxy-2-carboxyindole, 6-hydroxy-2,3-dimethylindole, 6-hydroxy-3-carboxyindole, 6-hydroxy-3-ethoxycarbonylindole, 6-hydroxy-2-ethoxycarbonylindole, 6-hydroxy-3-methylindole, 6-hydroxy-1-methylindole, 7-hydroxyindole, 7-hydroxy-3-methylindole.

82. (new) The composition of claim 81, wherein the heterocyclic coupler of formula (V''') is 6-hydroxyindole.

83. (new) The composition of claim 79, wherein the compounds of formulae (V'') and/or (V''') represent from about 0.0001 to about 10% by weight relative to the total weight of the composition.

84. (new) The composition of claim 54, wherein the cationic tertiary para-phenylenediamine(s) having a pyrrolidine ring represent from about 0.001 to about 10% by weight relative to the total weight of the composition.

85. (new) The composition of claim 54, wherein the composition further comprises at least one cationic polymer.

86. (new) The composition of claim 54, wherein the composition further comprises at least one thickening polymer.

87. (new) The composition of claim 54, wherein the composition further comprises at least one surfactant chosen from the group consisting of anionic surfactants, amphoteric or zwitterionic surfactants, nonionic surfactants and cationic surfactants.

88. (new) The composition of claim 54, wherein the composition further comprises at least one additional oxidation base chosen from para-phenylenediamines, bis-phenylalkylenediamines, ortho-aminophenols, heterocyclic bases and their addition salts.

89. (new) The composition of claim 88, wherein the additional oxidation base(s) are present in a quantity of between about 0.001 to about 20% by weight relative to the total weight of the composition.

90. (new) The composition of claim 54, wherein the composition further comprises at least one additional coupler chosen from meta-phenylenediamines, meta-aminophenols, meta-diphenols, naphthalene couplers, heterocyclic couplers and their addition salts.

91. (new) The composition of claim 90, wherein the coupler is chosen from 1,3-dihydroxybenzene, 1,3-dihydroxy-2-methylbenzene, 4-chloro-1,3-dihydroxybenzene, 2,4-diamino-1-( $\beta$ -hydroxyethyloxy)benzene, 2-amino-4-( $\beta$ -hydroxyethylamino)-1-methoxybenzene, 1,3-diaminobenzene, 1,3-bis(2,4-diaminophenoxy)propane, 3-ureidoaniline, 3-ureido-1-dimethylaminobenzene,

sesamol, 1- $\beta$ -hydroxyethylamino-3,4-methylenedioxybenzene,  $\alpha$ -naphthol, 2-methyl-1-naphthol, 4-hydroxyindole, 4-hydroxy-N-methylindole, 2-amino-3-hydroxypyridine, 3,5-diamino-2,6-dimethoxypyridine, 1-N-( $\beta$ -hydroxyethyl)amino-3,4-methylenedioxybenzene, 2,6-bis( $\beta$ -hydroxyethylamino)toluene and their addition salts.

92. (new) The composition of claim 90, wherein the additional coupler(s) are present in a quantity of between about 0.001 and about 20%, by weight relative to the total weight of the composition.

93. (new) The composition of claim 54, wherein the composition further comprises at least one direct dye.

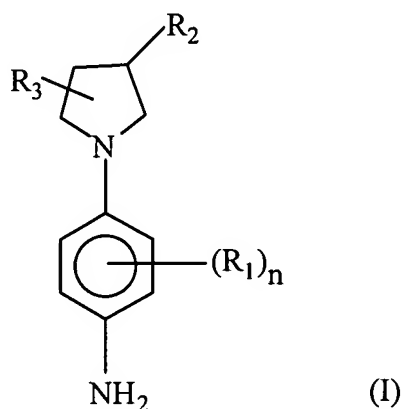
94. (new) The composition of claim 54, wherein the composition further comprises at least one hydroxylated solvent such as ethanol, propylene glycol, glycerol, polyol monoethers.

95. (new) The composition of claim 54, wherein the composition further comprises an oxidizing agent chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, persalts, peracids and oxidase enzymes, and preferably hydrogen peroxide.

96. (new) A method for the oxidation dyeing of keratinous fibres such as hair, wherein a dyeing composition as defined in claim 54 is applied to the fibres in the presence of an oxidizing agent.

97. (new) A multicompartment device in which a first compartment contains a dyeing composition for dyeing keratinous fibres, as defined in claim 54, and a second compartment contains an oxidizing agent.

98. (new) A dyeing composition for dyeing keratinous fibres, in particular human keratinous fibres such as hair, comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, at least one non-cationic tertiary para-phenylenediamine, and at least one benzomorpholine coupler, wherein the cationic tertiary para-phenylenediamine corresponds to formula I:

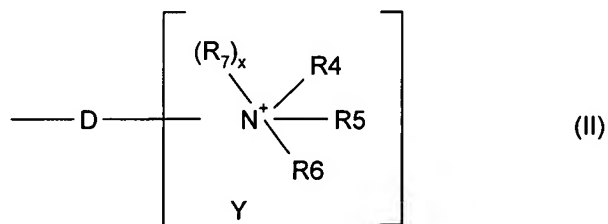


in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals  $R_1$  may be identical or different,

$R_1$  represents a chlorine, bromine,  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  hydroxyalkyl,  $C_1$ - $C_4$  aminoalkyl,  $C_1$ - $C_4$  alkoxy or  $C_1$ - $C_4$  hydroxyalkoxy radical,

$R_2$  represents an onium radical Z corresponding to formula (II)



in which

D is a single bond of a linear or branched  $C_1$ - $C_{14}$  alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl,  $C_1$ - $C_6$  alkoxy or amino radicals and which may carry one or more ketone functional groups;

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub>, taken separately, represent a C<sub>1</sub>-C<sub>15</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> amidoalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical in which the amine is mono- or di-substituted with a C<sub>1</sub>-C<sub>4</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; or

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> together, in pairs, form, with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated carbon ring which may contain one or more heteroatoms, it being possible for the cationic ring to be substituted with a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxy-alkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, a thio (-SH) radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl (-R-SH) radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical;

R<sub>7</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxy-alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; R<sub>4</sub> with R<sub>5</sub> together form an azetidine, pyrrolidine, piperidine, piperazine or morpholine ring, R<sub>6</sub> being chosen in this case from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyl alkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical; a C<sub>1</sub>-



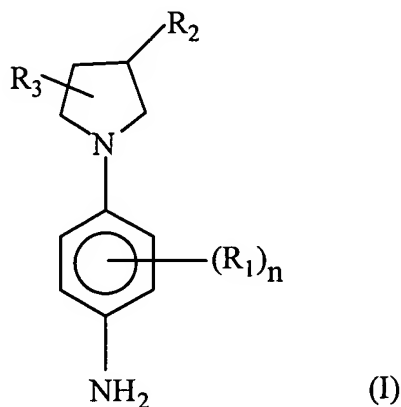
C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

x = 1, and two of the radicals R<sub>4</sub> to R<sub>6</sub> form, together with the nitrogen atom to which they are attached, a 4-, 5-, 6- or 7-membered saturated ring and D is linked to the carbon atom of the saturated ring;

Y is a counter-ion, and

R<sub>3</sub> represents a hydrogen atom or a hydroxyl radical.

99. (new) A dyeing composition for dyeing keratinous fibres, in particular human keratinous fibres such as hair, comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, at least one non-cationic tertiary para-phenylenediamine, and at least one benzomorpholine coupler, wherein the cationic tertiary para-phenylenediamine corresponds to formula I:

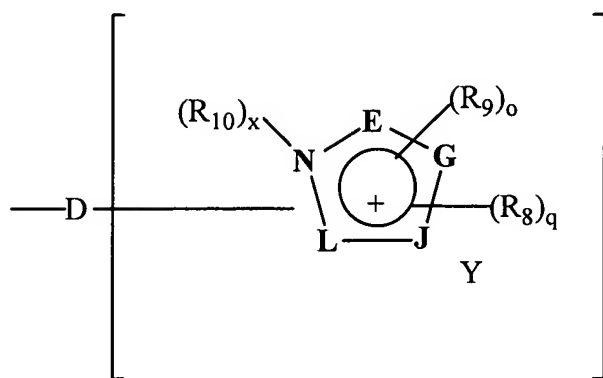


in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals R<sub>1</sub> may be identical or different,

R<sub>1</sub> represents a chlorine, bromine, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> hydroxyalkyl, C<sub>1</sub>-C<sub>4</sub> aminoalkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy or C<sub>1</sub>-C<sub>4</sub> hydroxyalkoxy radical,

R<sub>2</sub> represents an onium radical Z corresponding to formula III



(III)

in which

D is a single bond or a linear or branched C<sub>1</sub>-C<sub>14</sub> alkylene chain which may contain one or more heteroatoms chosen from oxygen, sulphur or nitrogen, and which may be substituted with one or more hydroxyl, C<sub>1</sub>-C<sub>6</sub> alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a pyrrole, pyrazole, imidazole, triazole, oxazole, isooxazole, thiazole, isothiazole ring,

q is an integer between 0 and 4 inclusive;

o is an integer between 0 and 3 inclusive;

q+o is an integer between 0 and 4;

the radicals R<sub>8</sub>, which are identical or different, represent a halogen atom, a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a carboxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, a thio radical, a C<sub>1</sub>-C<sub>6</sub> thioalkyl

radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylthio radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; it being understood that the radicals R<sub>8</sub> are carried by a carbon atom,

the radicals R<sub>9</sub>, which are identical or different, represent a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a benzyl radical; it being understood that the radicals R<sub>9</sub> are carried by a nitrogen,

R<sub>10</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J or L,

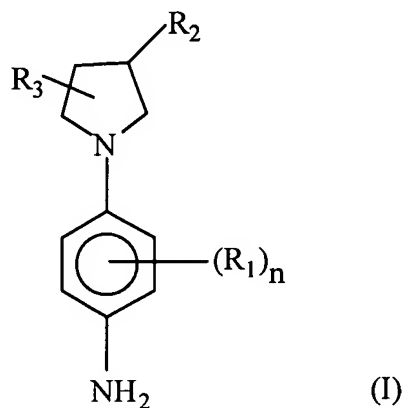
Y is a counter-ion, and

$R_3$  represents a hydrogen atom or a hydroxyl radical.

100. (new) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that the vertices E, G, J and L form an imidazole ring.

101. (new) The composition of claim 99, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0, D is a single bond or an alkylene chain which may be substituted.

102. (new) A dyeing composition for dyeing keratinous fibres, in particular human keratinous fibres such as hair, comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, at least one non-cationic tertiary para-phenylenediamine, and at least one benzomorpholine coupler, wherein the cationic tertiary para-phenylenediamine corresponds to formula I:

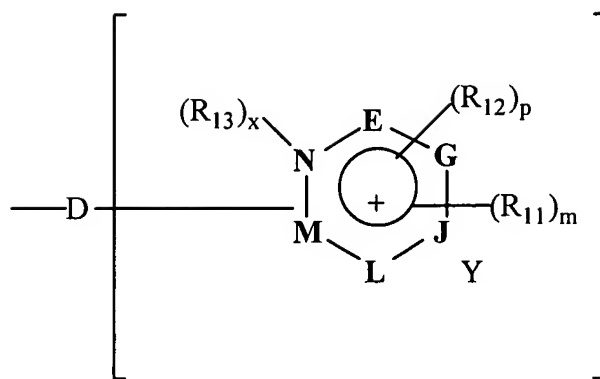


in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals  $R_1$  may be identical or different,

$R_1$  represents a chlorine, bromine,  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  hydroxyalkyl,  $C_1$ - $C_4$  aminoalkyl,  $C_1$ - $C_4$  alkoxy or  $C_1$ - $C_4$  hydroxyalkoxy radical,

$R_2$  represents an onium radical Z corresponding to formula IV



(IV)

in which:

D is a single bond or a linear or branched  $C_1$ - $C_{14}$  alkylene chain which may contain one or more heteroatoms chosen from an oxygen, sulphur or nitrogen atom, and which may be substituted with one or more hydroxyl,  $C_1$ - $C_6$  alkoxy or amino radicals, and which may carry one or more ketone functional groups;

the vertices E, G, J, L and M form, which are identical or different, represent a carbon, oxygen, sulphur or nitrogen atom to form a ring chosen from the pyridine, pyrimidine, pyrazine, triazine and pyridazine rings;

p is an integer between 0 and 3 inclusive;

m is an integer between 0 and 5 inclusive;

$p+m$  is an integer between 0 and 5;

the radicals  $R_{11}$ , which are identical or different, represent a halogen atom, a hydroxyl radical, a  $C_1$ - $C_6$  alkyl radical, a  $C_1$ - $C_6$  monohydroxyalkyl radical, a  $C_2$ - $C_6$  polyhydroxyalkyl radical, a  $C_1$ - $C_6$  alkoxy radical, a tri( $C_1$ - $C_6$ )alkylsilane( $C_1$ - $C_6$ )alkyl radical, an amido radical, a carboxyl radical, a  $C_1$ - $C_6$  alkylcarbonyl radical, a thio radical, a  $C_1$ - $C_6$  thioalkyl radical, a ( $C_1$ - $C_6$ )alkylthio radical, an amino radical, an amino radical which is substituted with a ( $C_1$ - $C_6$ )alkyl, ( $C_1$ - $C_6$ )alkylcarbonyl, amido or ( $C_1$ - $C_6$ )alkylsulphonyl radical; a

C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; it being understood that the radicals R<sub>11</sub> are carried by a carbon atom,

the radicals R<sub>12</sub>, which are identical or different, represent a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a benzyl radical; it being understood that the radicals R<sub>12</sub> are carried by a nitrogen,

R<sub>13</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; an aryl radical; a benzyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carboxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a C<sub>1</sub>-C<sub>6</sub> trifluoroalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a C<sub>1</sub>-C<sub>6</sub> sulphonamidoalkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarboxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylsulphonamido(C<sub>1</sub>-C<sub>6</sub>)alkyl radical;

x is 0 or 1

when x = 0, the linking arm D is attached to the nitrogen atom,

when x = 1, the linking arm D is attached to one of the vertices E, G, J, L or M,

Y is a counter-ion, and

R<sub>3</sub> represents a hydrogen atom or a hydroxyl radical.

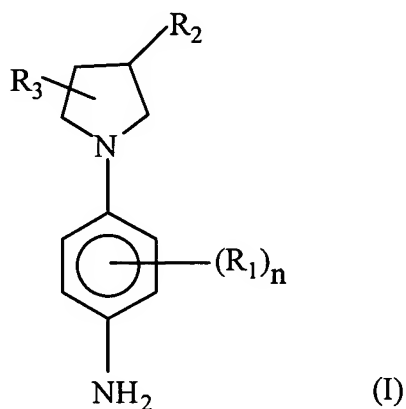
103. (new) The composition of claim 102, wherein the vertices E, G, J, L and M form, with the nitrogen of the ring, a ring chosen from pyridine and pyrimidine rings.

104. (new) The composition of claim 102, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 0 and R<sub>11</sub> is chosen from a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical or a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical and R<sub>12</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical.

105. (new) The composition of claim 102, wherein the cationic tertiary para-phenylenediamine is such that x is equal to 1 and R<sub>13</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical; a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical; a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical; a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical, a C<sub>1</sub>-C<sub>6</sub> aminoalkyl radical whose amine is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl radical, an amido radical, a (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical; a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; a (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; an N-(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamyl(C<sub>1</sub>-C<sub>6</sub>)alkyl radical; R<sub>11</sub> is chosen from a hydroxyl radical, a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a C<sub>1</sub>-C<sub>6</sub> alkoxy radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, an amido radical, a C<sub>1</sub>-C<sub>6</sub> alkylcarbonyl radical, an amino radical, an amino radical which is mono- or di-substituted with a (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkylcarbonyl, amido or (C<sub>1</sub>-C<sub>6</sub>)alkylsulphonyl radical; and R<sub>12</sub> is chosen from a C<sub>1</sub>-C<sub>6</sub> alkyl radical, a C<sub>1</sub>-C<sub>6</sub> monohydroxyalkyl radical, a C<sub>2</sub>-C<sub>6</sub> polyhydroxyalkyl radical, a tri(C<sub>1</sub>-C<sub>6</sub>)alkylsilane(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl radical, a C<sub>1</sub>-C<sub>6</sub> carbamylalkyl radical.

106. (new) The composition of claim 102, wherein the cationic tertiary para-phenylenediamine is such that  $R_{11}$ ,  $R_{12}$  and  $R_{13}$  are alkyl radicals which may be substituted.

107. (new) A dyeing composition for dyeing keratinous fibres, in particular human keratinous fibres such as hair, comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, at least one non-cationic tertiary para-phenylenediamine, and at least one benzomorpholine coupler, wherein the cationic tertiary para-phenylenediamine corresponds to formula I:



in which

$n$  varies from 0 to 4, it being understood that when  $n$  is greater than or equal to 2, then the radicals  $R_1$  may be identical or different,

$R_1$  represents a chlorine, bromine,  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  hydroxyalkyl,  $C_1$ - $C_4$  aminoalkyl,  $C_1$ - $C_4$  alkoxy or  $C_1$ - $C_4$  hydroxyalkoxy radical,

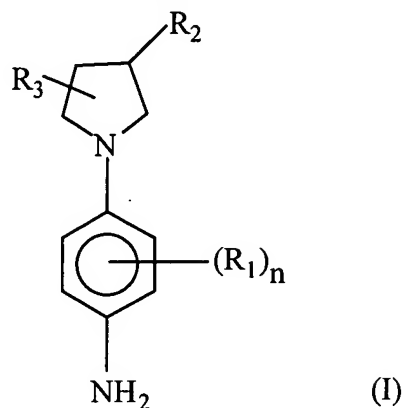
$R_2$  represents the radical of formula  $-XP(O)(O-)OCH_2CH_2N^+(CH_3)_3$  where  $X$  represents an oxygen atom or a radical  $-NR_{14}$ ,  $R_{14}$  representing a hydrogen, a  $C_1$ - $C_4$  alkyl radical or a hydroxyalkyl radical, and

$R_3$  represents a hydrogen atom or a hydroxyl radical.

108. (new) A dyeing composition for dyeing keratinous fibres, in particular human keratinous fibres such as hair, comprising, in an appropriate dyeing medium, at least one cationic tertiary para-phenylenediamine containing a pyrrolidine ring, at least one non-cationic tertiary para-phenylenediamine, and



at least one benzomorpholine coupler, wherein the cationic tertiary para-phenylenediamine corresponds to formula I:



in which

n varies from 0 to 4, it being understood that when n is greater than or equal to 2, then the radicals  $R_1$  may be identical or different,

$R_1$  represents a chlorine, bromine,  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  hydroxyalkyl,  $C_1$ - $C_4$  aminoalkyl,  $C_1$ - $C_4$  alkoxy or  $C_1$ - $C_4$  hydroxyalkoxy radical,

$R_2$  represents a guanidine radical of formula  $-X-C=NR_8-NR_9R_{10}$ , X represents an oxygen atom or a radical  $-NR_{11}$ ,  $R_8$ ,  $R_9$ ,  $R_{10}$  and  $R_{11}$  representing a hydrogen, a  $C_1$ - $C_4$  alkyl radical or a  $C_1$ - $C_4$  hydroxyalkyl radical, and

$R_3$  represents a hydrogen atom or a hydroxyl radical.